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EXAMINER

JACOBS, LASHONDA T

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* VENKATA R. JAGANA

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Appeal 2008-004579  
Application 09/686,049  
Technology Center 2400

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Decided: August 20, 2009

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Before JOHN C. MARTIN, HOWARD B. BLANKENSHIP, and  
JEAN R. HOMERE, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-21, 23, 25-27, and 29, which are all of the pending claims in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

### *Invention*

Appellant's invention relates to a system, method, and article for host-to-host connectivity through a storage area network (SAN). The end-to-end connectivity is accomplished through a FICON (Fibre Connectivity) protocol, over a Fiber Channel layered stack on a standard Fiber Channel adapter that runs transparently across the SAN infrastructure. (Abstract).

### *Representative Claim*

16. A method for facilitating the communications of a first host comprising:

communicating with a second host using a storage area network protocol in a non- ESCON protocol manner; and

communicating with a storage area network using the storage area network protocol in a non-ESCON protocol manner, the storage area network including a plurality of storage devices exclusive of the first host and the second host.

### *Prior Art*

Latif	6,400,730	June 4, 2002
Bradley	6,769,021	July 27, 2004

*Examiner's Rejections*

Claims 1-21, 23, 25-27, and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bradley and Latif.

ISSUE

Has Appellant shown the Examiner erred in finding that the combination of Bradley and Latif teaches communicating between first and second hosts using a storage area network protocol in a non-ESCON protocol manner?

FINDINGS OF FACT

*Bradley*

1. Bradley discloses methods of partitioning end nodes in a network fabric (Title).
2. Fig. 1 shows a prior art subnet 100 with hosts 102a and 102b connected to the subnet. Fig. 1; col. 1, ll. 59-60.
3. Also connected to subnet 100 are computers 104a and 104b and associated storage nodes 106a and 106b. Fig. 1; col. 1, ll. 60-63.
4. The subnet 100 is a shared fabric environment which allows communication between all users connected to the subnet 100. Col. 1, ll. 63-65.
5. Hosts 102a and 102b are able to communicate with each other and with the other devices on the subnet 100, such as the storage nodes 106a and 106b. Col. 2, ll. 1-4.
6. In a subnet, a node can be a host, an I/O adapter, a switch, or the like. Future I/O is a switched fabric architecture that enables routing to

other fabrics, such as Ethernet, ATM and FDDI, using the well known Internet Protocol (IP). Col. 4, ll. 15-20.

7. Within the Future I/O fabric, partitioning is the logical association of two or more end nodes in a fabric for the purpose of enabling communication between those end nodes. The association of the two end nodes with each other facilitates communication between each of the end nodes. An end node may be a Future I/O adapter (i.e., peripheral devices such as RAID controllers) or a computer system, where the computer system may be a single entity or a cluster of single entities such as a SAN. Col. 4, ll. 43-52.

8. In a single partition orientation, all the end nodes in the Future I/O fabric are associated with one another. Col. 4, ll. 54-56.

9. The subnet 200 uses Future I/O fabric to connect end nodes, such as a host 202a and a host 202b, and other end nodes, such as end nodes 212a and 212b to the subnet 200. Col. 5, ll. 14-18.

10. The hosts 202a and 202b are any type of processing device, including a personal computer, or any other device which includes at least a processor and memory, such that the hosts 202a and 202b may be storageless hosts. Col. 5, ll. 18-22.

11. The host 202a contains a partition key 206a installed on the host end node logic. The partition key allows the host 202a to communicate with other end nodes on the subnet, such as end node 212a and the storage device 214a. Fig. 2A, col. 5, ll. 26-33.

*Latif*

12. Latif teaches a SoIP framework that enables Fiber Channel Protocol for use on an IP network by defining the SoIP protocol. Storage

devices and host bus adapters operating the SoIP protocol form a SAN directly on an IP network. Col. 6, ll. 17-22.

## PRINCIPLES OF LAW

### *Prima Facie Case of Unpatentability*

The allocation of burdens requires that the USPTO produce the factual basis for its rejection of an application under 35 U.S.C. §§ 102 and 103. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967)). The one who bears the initial burden of presenting a prima facie case of unpatentability is the Examiner. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

### *Obviousness*

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

## ANALYSIS

Appellant contends that Bradley does not disclose a SAN with which the first and the second hosts communicate using a SAN protocol (App. Br. 9). The Examiner finds that Bradley discloses a SAN (Ans. 8-9). Appellant responds that Bradley does not disclose a SAN that connects one host to another host (Reply Br. 2-4).

We agree with Appellant. Bradley teaches that an end node can be a host (FF 9) or a cluster of entities, such as a SAN (FF 7). Bradley also

teaches that a subnet 200 connects end nodes to other end nodes (FF 8-9). However, Bradley is silent on whether the subnet 200 itself is a SAN, and whether the subnet 200 uses a SAN protocol.

The Examiner concludes that since “Bradley allows communication over the subnet between the end nodes, then the appropriate protocol must be used in order for the nodes to communicate with each other” (Ans. 8-9). Clearly, a network protocol is used by subnet 200, but Bradley does not describe the protocol as a SAN protocol. Without additional evidence we are unable to conclude that the subnet 200 of Bradley might be able to use a SAN protocol, and in particular that hosts on subnet 200 might be able to communicate with each other using a SAN protocol.

The Examiner also finds that “the subnet of Bradley reads on the broadest reasonable interpretation of SAN, which is a high-speed sub-network of shared storage devices” (Ans. 9). However, the Examiner has not provided any evidence to support this interpretation. In fact, Bradley draws a distinction between the subnet 200 and an end node that is a SAN (FF 7-9). Given that Bradley teaches a distinction between an end node that can be a SAN and the subnet that connects end nodes to each other, we are unable to conclude that the broadest reasonable interpretation of a SAN includes the subnet 200 that connects storage end nodes to host end nodes. Therefore, Bradley does not teach communicating between the first and second hosts using the SAN protocol in a non-ESCON protocol manner.

Latif teaches a SoIP protocol that allows storage devices to communicate on an IP network (FF 12). Given that the network of Latif is an IP network, one host communicates with another host using the IP

protocol. Therefore, Latif does not teach the claimed “communicating” between hosts.

Appellant has thus demonstrated error in the Examiner’s findings in support of the rejection. Because the rejection of each of the independent claims (1, 4, 7, 16, 19, and 25) relies on the findings shown to be in error, we cannot sustain the rejection of any claim on appeal.

### CONCLUSION OF LAW

Appellant has shown the Examiner erred in finding that the combination of Bradley and Latif teaches communicating between first and second hosts using a storage area network protocol in a non-ESCON protocol manner.

### DECISION

The Examiner’s rejection of claims 1-21, 23, 25-27, and 29 under 35 U.S.C. § 103(a) as being unpatentable over Bradley and Latif is reversed.

### REVERSED

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